**Vocabulary: Magnetic Induction**



**Vocabulary**

* Current – the flow of electrical charge.
	+ In a metal wire, current is the flow of negatively charged particles (electrons).
	+ Current is measured in amperes (A).
	+ In equations, the symbol for current is *I*.
* Induced magnetic field – a *magnetic field* that surrounds a current in a circuit.
* Magnetic field – a region in space that surrounds a magnet or moving charged particle.
	+ Magnets and moving charges within the magnetic field experience a force.
	+ Magnetic field lines show the direction magnetic objects such as iron filings or compass needles will align to.
	+ Magnetic forces are greatest where the magnetic field lines are closest together.
	+ The symbol for the strength of a magnetic field is *B*. It is typically measured in gauss (G).
* Pythagorean Theorem – a law that states that the square of the length of a right triangle’s hypotenuse (*c*) is equal to the sum of the squares of the lengths of the two legs (*a* and *b*): *a2* + *b2* = *c2*.



**Right-hand rule**

* Right-hand rule – a way to visualize the magnetic field produced by an electric current.
	+ The thumb points in the direction of conventional (positive) current, while the fingers show the direction of the magnetic field.